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Control of technological parameters of precision stamping process based on fuzzy logic

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Abstract

© 2018 IEEE. Precision stamping is a special type of processing of metal blanks, in which it becomes possible to create such parts, which subsequently will not need additional machining. Most often, after this type of stamping the parts are immediately ready to use. Process control precision stamping is based on the use of fuzzy logic, because the process parameters belong to a certain interval. In this paper, fuzzy logic is used to maintain process performance in the required ranges. Fuzzy logic is made in the form of production rules on the basis of a precompiled knowledge base using linguistic variables, the function of belonging of triangular terms is selected for precision stamping and the process of fuzzification is presented by the example of a certain variable.

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Keywords

Control system, Fuzzy logic, Knowledge base, Membership function

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